

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims 1-6:**

1. (cancelled)

2. (currently amended) A method for manufacturing a single crystal semiconductor, in which a seed crystal is dipped into melt in a crucible and is pulled up at a pulling-up speed to manufacture the single crystal semiconductor having an impurity added thereto, ~~wherein, including the steps of:~~

~~in a process of pulling up the single crystal semiconductor, a pulling-up speed fluctuation width in 10 seconds is adjusted to less than 0.025 mm/min~~

using a crystal diameter as a target value, and

adjusting the pulling-up speed to be within a range so that the crystal diameter is maintained within the target value, and setting a limit to the range of the pulling-up speed such that a pulling-up speed fluctuation in 10 seconds is less than 0.025mm/min.

3. (cancelled)

4. (currently amended) The method for manufacturing the single crystal semiconductor of claim 2, wherein,

~~when the pulling-up speed is controlled such that a diameter of the single crystal semiconductor is adjusted to a desired diameter,~~  
the pulling-up speed is adjusted to the range, a magnetic field of 1500 gauss or above is applied to the melt.

5. (previously presented) The method for manufacturing the single crystal semiconductor of claim 2, wherein

the impurity to be added into the single crystal semiconductor is boron B or gallium Ga, and the impurity concentration is  $8.0 \times 10^{17}$  atoms/cc or more.

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6. (previously presented) The method for manufacturing the single crystal semiconductor of claim 2, wherein

the impurity to be added into the single crystal semiconductor is phosphorus P, antimony Sb, or arsenic As, and the impurity concentration is  $5.0 \times 10^{17}$  atoms/cc or more.